

Recombinant Rat PPARA Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52350

Size: 10ug, 100ug

Protein Name: Peroxisome proliferator-activated receptor alpha (PPAR-alpha) (Nuclear receptor subfamily 1 group C member 1)

Synonym: Ppara, Nr1c1, Ppar

UniProt ID: P37230

UniProt Link: www.uniprot.org/uniprotkb/P37230/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 468 AA

Molecular Weight: 52 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MVDTESPICPLSPLEADDLESPLSEEFLLQEMGNIQEISQSLGEESSGSFSFADYQYLGSCPGSEGSVI
TDTLSPASSPSSVSCPAVPTSTDESPGNALNIECRICGDKASGYHYGVHACEGCKGFFRRTIRLKLA
YDKCDRSCIKKKNRNKQCQYCRFHKCLSVGMSHNAIRFGRMPRSEKAKLKAELTCEHDLKDSETA
DLKSLAKRIHEAYLKNFNMNKVKARVILAGKTSNNPPFVIHDMETLCMAEKT LVAKMVANGVENKEA
EVRFFHCCQCMSVETVTELTEFAKAIPGFANLDLNDQVTLLKYGVYEAIFTMLSSLMNKGMLIAYGN
GFITREFLNLRKPFCDIMEPKFDFAMKFNALELDDSDISLFVAAIICCGDRPGLLNIGYIEKLQEGIVHV
LKLHLQSNHPDDTFLFPKLLQKMVDLRQLVTEHAQLVQVIKKTESDAALHPLLQEIYRDMY

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Peroxisome proliferator-activated receptor alpha (PPAR-alpha) (Nuclear receptor subfamily 1 group C member 1) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Ligand-activated transcription factor. Key regulator of lipid metabolism. Activated by the endogenous ligand 1-palmitoyl-2-oleoyl-sn-glycerol-3-phosphocholine (16:0/18:1-GPC). Activated by oleylethanolamide, a naturally occurring lipid that regulates satiety. Receptor for peroxisome proliferators such as hypolipidemic drugs and fatty acids. Regulates the peroxisomal beta-oxidation pathway of fatty acids. Functions as a transcription activator for the ACOX1 and P450 genes. Transactivation activity requires heterodimerization with RXRA and is antagonized by NR2C2. May be required for the propagation of clock information to metabolic pathways regulated by PER2 (By similarity).

Subcellular Localization: Nucleus.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.